

Appn No. 09/825,851

Am dt date December 17, 2004

Reply to Office action of September 17, 2004

REMARKS / ARGUMENTS

The above identified patent application has been amended and reconsideration and reexamination are hereby requested.

Claims 1 - 10 are now in the application. Claims 5 and 6 have been amended. Claim 11 has been cancelled.

The Examiner has rejected Claims 5 and 6 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

The Applicants have amended Claim 5 to depend on Claim 4 rather than Claim 1, thereby providing proper antecedent basis for the term "additional received timestamp report message pairs."

The Applicants have amended Claim 6 to call for "subtracting from the time for a current master-connected synchronous network transmission opportunity a value representing a time required for the master node to receive, process and forward packets from slave nodes to the synchronous network to yield a best arrival time," (emphasis added), consistent with the Examiner's suggestions.

The Applicants submit that Claims 5 and 6 now particularly point out and distinctly claim the subject matter which the Applicants regard as the invention.

The Examiner has rejected Claims 1 - 3 and 9 as being anticipated by Wilson et al. under 35 U.S.C. §102(b), and Claim 11 as being anticipated by Burns et al. under 35 U.S.C. §102(e). The Examiner has also rejected under 35 U.S.C. §103(a): Claims 4 - 7 as being unpatentable over Wilson et al. in view of Burns et

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al., and Claim 10 as being unpatentable over Wilson et al. in view of Holloway et al. However, the Examiner has found Claim 8 to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Applicants' Claim 1 calls for "designating as a slave node each non-master asynchronous network node which desires to synchronously transport packets across the asynchronous network as a slave node." (emphasis added.) Wilson et al., while providing for the transmission of data packets over synchronized slave stations, neither discloses transmission of packets within asynchronous networks nor does it suggest limiting synchronization to stations that "desire to synchronously transport packets."

Wilson et al. discusses only a particular and very limited type of network, a dual-bus with decentralized stations. (See Column 1, lines 5 - 31). It does not discuss other network structures, such as graph- or tree-shaped structures, or networks in general, particularly not asynchronous ones. In the few places where Wilson et al. refers to the disclosed bus as a "network," the context clarifies that it cannot be a network of any, general structure. For example, it discusses "one end of the network." (See Column 3, line 16). General, e.g. graph-structured, networks do not have "ends." A "network" having an "end" suggests a structure of linear shape such as a bus.

Wilson et al. further does not disclose the possibility of synchronizing only those "non-master asynchronous network node[s] which desire[] to synchronously transport packets across the asynchronous network as [] slave node[s]." (emphasis added.)

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Wilson et al. instead calls for "[t]he master station [to] send[] a start packet 19 to the bus in order to synchronize the stations." (See Column 6, lines 40 - 41). It becomes clear from the context leading up to this statement, that "the stations" means all the non-master stations. (See Column 6, lines 15 - 40). In contrast, Claim 1 of the present invention only calls for synchronizing those nodes that "desire[] to synchronously transport packets across the asynchronous network as [] slave node[s]." All other nodes in the network may remain asynchronous.

The difference between the fully synchronized bus disclosed in Wilson et al. and the partly, i.e. only as necessary, synchronized and otherwise asynchronous network of nodes of any network structure of the present invention becomes more apparent when considering that the invention disclosed in Wilson et al. regards a linear network structure with only one possible path between any pair of stations. (See Fig. 1). The present invention instead also functions within a complex, non linear network, (See, e.g., Fig. 70 of the present Application) allowing for packet-switching through often multiple different paths connecting two nodes. (See page 134, line 18 of the present Application). As such, the Applicants submit that Claim 1 is not anticipated by Wilson et al. under 35 U.S.C. §102(b).

Claims 2 - 7, 9 and 10 are dependent on Claim 1. As such, these claims are believed allowable based upon Claim 1.

The Examiner has provisionally rejected Claims 1 - 10 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1 - 6 of co-pending

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application Serial No. 09/826,067 in view of Wilson et al. The Examiner states that Claims 1 - 10 would be allowable if a timely Terminal Disclaimer is filed.

The Applicants submit herewith a Terminal Disclaimer to overcome the obviousness-type double patenting rejections. Accordingly, the Applicants respectfully request that the provisional double-patenting rejections be withdrawn.

In view of the above amendment and remarks it is submitted that the remaining Claims 1 - 10 are patentably distinct over the prior art and that all the rejections to the claims have been overcome. Reconsideration and reexamination of the above Application is requested.

Respectfully submitted,

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